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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,473	06/14/2001	Saeed Fereshtekhou	6798MD	7501

27752 7590 10/07/2002

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EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 10/07/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Keep in case

mvb-3

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/881,473	FERESHTTEHKHOU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ula C Ruddock	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 14 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on August 28, 2001, has been considered by the examiner.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-12, 14, and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-12, 14, and 23-25 are indefinite because they fail to set forth the structure of the cleaning sheet and only claim the properties (i.e. Average Peak to Peak Distance, Surface Topography Index, Average Height Differential) desired in the cleaning sheet. Claims that merely set forth physical characteristics desired in an article, and not setting forth specific compositions which would meet such characteristics are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future. *Ex parte Slob* (PO BdApp) 157 USPQ 172. In other words, Applicant has failed to set forth any structural limitations to the claimed cleaning sheet except for the recitation that the cleaning sheet has a first and a second outward surface. What structural limitations produce the recited Average Peak to Peak Distance, Surface Topography Index, Average Height

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Differential properties? In other words, since the claims only recite the properties produced by the cleaning sheet without claiming the structure of the cleaning sheet, it is unclear what structure would meet the recited properties, and thus, the scope of the claims is indefinite.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-17, 23-27, 35, 36, 44-48, and 50-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Shizuno et al. (US 5,525,397). Shizuno et al. disclose a cleaning sheet comprising a network sheet and a nonwoven fiber aggregate formed by the entanglement of fibers of a fiber web. The fibers of the nonwoven fiber aggregate are further entangled with the network sheet (abstract) by water needling, i.e. hydroentangling (col 1, ln 64). The cleaning sheet is used for the purposes of collecting various kinds of dust (col 1, ln 12-14). The cleaning sheet can comprise a network sheet and two nonwoven fiber aggregates. The nonwoven fiber aggregate which is formed by the entanglement of fibers of a fiber web is disposed on opposite sides of the network sheet. The fibers of the nonwoven fiber aggregates are further entangled with the network sheet (col 3, ln 6-22). The material of the network sheet and the fiber aggregate may be selected from

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polyester, polyamides, and polyolefins (col 3, ln 39-47 and col 4, ln 3-10). The nonwoven fiber aggregate can be combined with a surface-active agent or a lubricant which can improve the surface physical properties of the fiber aggregate and can adsorb dust, or can be combined with a lubricant which imparts gloss to the surface to be cleaned (col 4, ln 26-31). The cleaning sheet is attached to a cleaning tool such as a mop handle (col 4, ln 48-51).

Given that Shizuno et al. meet each and every chemical and structural requirement set forth in the claims, then it must meet the property limitations of Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential recited that depend from said requirements. In other words, it is reasonable to presume that the invention of Shizuno et al. would inherently anticipate the physical properties of the present invention, since both inventions are drawn to hydroentangled cleaning sheets made of polyester or polyolefin fibers.

Since no other structural or chemical features are claimed which may distinguish the present invention from that of the Shizuno et al. invention, the presently claimed physical properties, that is, Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential are deemed to be inherent to the invention of Shizuno et al. The burden is upon Applicant to prove otherwise. Note *In re Fitzgerald*, 205 USPQ 495. Without a showing that evidences a difference between the prior art and the present invention, anticipation is proper. However, such evidence could support the proposition that the current claims are incomplete.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18-22 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (US 5,525,397), as set forth above, in view of Henry (US 4,064,061) or Thrasher (US 5,342,436). Shizuno et al. disclose the claimed invention but fail to teach that the sheet is treated with an additive comprises a mineral oil or a wax at an add-on level of at least about 0.01-25% by weight at a ratio of oil to wax of from about 3:7 to about 99:1. Henry teaches a cleaning cloth composition that includes mineral oil and paraffin wax (col 1, ln 50 to col 2, ln 1-2) and Thrasher teaches a composition comprises paraffin wax dispersed in mineral oil (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used either Henry's or Thrasher's composition on Shizuno's cleaning sheet motivated by the desire to obtain a fibrous structure that leaves a protective residue on the surface to be cleaned.

It also would have been obvious to one having ordinary skill in the art to have the add-on amount of the additive and the ratio of oil to wax be within the claimed range, since it has been that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the add-on amount and the ratio of oil to wax in order to create a fibrous structure that can leave either a thin or thick protective residue.

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8. Claims 28-30, 37, 40-43, 49, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (US 5,525,397), as set forth above, in view of Gilmore et al. (US 5,369,858). Shizuno et al. disclose the claimed invention except for the teaching that the cleaning sheet further comprises a scrim material hydroentangled with the fibrous layers and the scrim material is made of a polypropylene. Gilmore et al. disclose a nonwoven fabric comprising at least one layer of a net (i.e. a scrim) of polymer filaments and at least one web of melt blown microfibers bonded together by hydroentangling (abstract). The polymeric nets can be prepared from polypropylene fibers (col 7, ln 7-8). It would have been obvious to one having ordinary skill in the art to have used Gilmore's scrim in the cleaning sheet of Shizuno et al. motivated by the desire to obtain a cleaning sheet with increased tensile strength.

Furthermore, given that Shizuno et al. meet each and every chemical and structural requirement set forth in the claims, then it must meet the property limitations of Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential recited that depend from said requirements. In other words, it is reasonable to presume that the invention of Shizuno et al. would inherently anticipate the physical properties of the present invention, since both inventions are drawn to hydroentangled cleaning sheets made of polyester or polyolefin fibers.

Since no other structural or chemical features are claimed which may distinguish the present invention from that of the Shizuno et al. invention, the presently claimed physical properties, that is, Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential are deemed to be inherent to the invention of Shizuno et al. The burden is upon

Applicant to prove otherwise. Note *In re Fitzgerald*, 205 USPQ 495. Without a showing that evidences a difference between the prior art and the present invention, anticipation is proper. However, such evidence could support the proposition that the current claims are incomplete. In addition, the presently claimed property of Average Peak to Peak Distance, Surface Topography Index, and Average Height Differential would obviously have been present once the Shizuno et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

9. Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (US 5,525,397) and Gilmore et al. (US 5,369,858) as applied to claim 37 above, and further in view of Henry (US 4,064,061) or Thrasher (US 5,342,436). Shizuno et al. and Gilmore et al. disclose the claimed invention except for the teaching that an additive selected from the group consisting of wax, oil, and mixtures thereof is included on the cleaning at a level of from about 4-8% by weight.

Henry teaches a cleaning cloth composition that includes mineral oil and paraffin wax (col 1, ln 50 to col 2, ln 1-2) and Thrasher teaches a composition comprises paraffin wax dispersed in mineral oil (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used either Henry's or Thrasher's composition on Shizuno's cleaning sheet motivated by the desire to obtain a fibrous structure that leaves a protective residue on the surface to be cleaned.

It also would have been obvious to one having ordinary skill in the art to have the add-on amount be within the claimed range, since it has been that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205



USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the add-on amount of the oil or wax in order to create a fibrous structure that can leave either a thin or thick protective residue.

### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: JP 06014859 disclose an article for cleaning to capture dust by partially joining and integrating a fabric base consisting of a non-woven fabric to a base plate sheet, but fails to disclose that the cleaning article is hydroentangled. A complete translation of the document has been ordered.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 703-305-0066. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

UCR *UCR*  
September 30, 2002

*Elizabeth M. Cole*  
ELIZABETH M. COLE  
PRIMARY EXAMINER